



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBW6205G11651-3G
Job Sheet 173121



Part No: RBW6205G11651-3G

Job Qty: 3 ea

APR 05 2018

DAS
13
9-89

Part Name: Guide



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/26/18

Job Tracking No:

Due Date: 3/9/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBW6205G11651-3G REV 1B IPP REV A 18.02.15 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	3 Ea		3/8/18	0.00	0.00	Start Up Waterjet2		
92	Purchasing	3 pcs		3/8/18	0.00	0.00	Purchasing		At 18/4/18
94	Packaging	3 pcs		3/8/18	0.00	0.00	Packaging2		At 18/4/18
96	QC	3 pcs		3/8/18	0.00	0.00	QC6		
100	Waterjet	3 pcs		3/9/18	0.25	0.50	Waterjet 2 OMAX		
110	QC	3 pcs		3/9/18	0.00	0.00	QC2 Waterjet 4		
120	CNC Vertical Machining	3 pcs		3/9/18	0.00	0.00	HAAS 1		N/A
130	QC	3 pcs		3/9/18	0.00	0.00	QC2 Machining-5		
140	QC	3 pcs		3/9/18	0.00	0.00	QC8 Machining-5		
170	Outsource	3 pcs		3/9/18	0.00	0.00	Outsource4		
180	Packaging	3 pcs		3/9/18	0.00	0.00	Packaging2		DAS
190	QC	3 pcs		3/9/18	0.00	0.00	QC6		38
200	Packaging	3 pcs		3/9/18	0.00	0.00	Packaging3-2		9-89
210	QC21-SA	3 Ea		3/9/18	0.00	0.00	QC21		

Part Op 92 - 1- Issue P/O to Arrow Tech Machine Works P/O# 039745 2- Manufacture RBW6205G11651-3G as per Descriptions: DWG 3- Certificate of conformity is required

100 - 1-Cut as per Dwg Dwg Rev: _____ Prog Rev: _____ 2-Deburr if necessary

120 - 1-Machine as per folio FB _____ FOLIO REV: _____ DWG REV: _____ 2- Run on Mazak 3-Deburr

130 - 1- Engrave T/N as per DWG

170 - 1-Issue P/O to ATG: _____ -ANODIZE COLOR CLEAR, PER IAW MIL-A-8625F TYPE 2 CLASS 1, Water sealant -Certificate of Conformity is required

180 - Receive

200 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBW6205G11651-3GP	Guide	3 (1 ea)	90-Start up Operation	558298

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	RBW6205G11651-3GP	3	0	0

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS							
	Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐
	Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐
	Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
	Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		

Date : _____ Step #: _____ QTY Effective : _____ MRB (QSI042) Approval _____

Descriptio

PART NO: RBW6205G11651-3G
 Serial No/Batch: S058371
 Revision: _____
 Operation: _____
 Change No: _____
 Packaging
 Mfg Date: 04/05/18
 Job No: 173121

Completed By

Lead hand / Supervisor
Approval Verification

QC / QA Coordinator
Approval

Root Cause				Guide			
Environment	☐	No Re-	☐	Process/Surge	☐	Positioned Wrong	☐
Design	☐	Operat	☐	ogram	☐	Outside Dimensions	☐
Doc/Data	☐	Offset	☐		☐	Over/Under tolerance	☐
Equip/Tooling	☐	Suppli	☐		☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐				
Misidentified	☐	Past Due	☐				
OTHER : _____							

Part Specifications

Specifications could not be found.

Plex 2/26/18 11:47 AM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

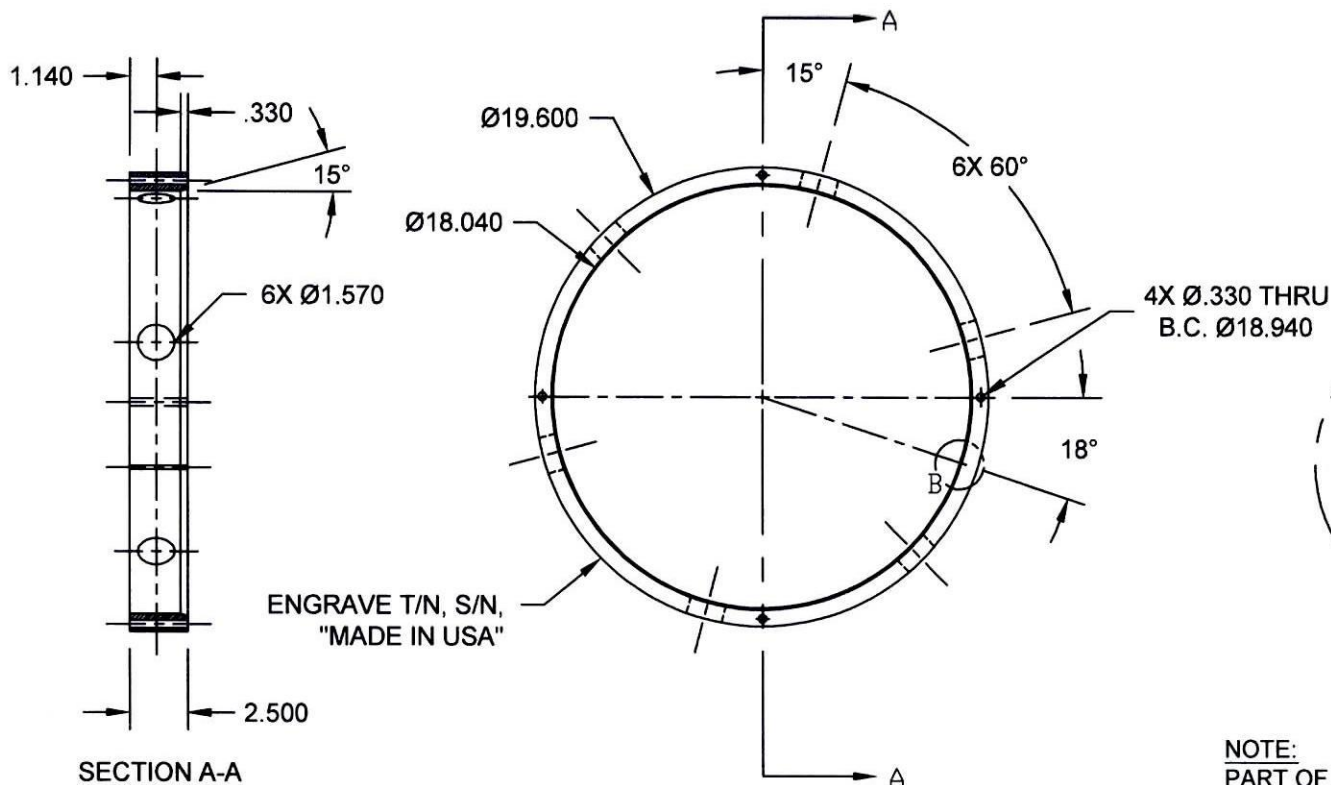
QA Closed: _____ Date: _____

Work Order update only ☐

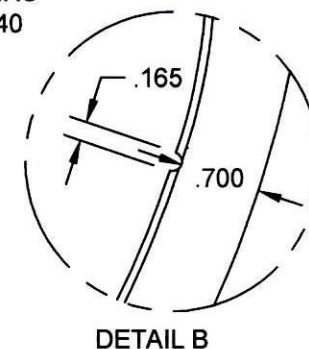
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	CH'D I.D. CHAMFER FROM 12° TO 15°, CORRECTED 15° & 18° ANGLES TO MEASURE 15° & 18° PER G.E.	1/31/11	RJC	RW
1A	CORRECTED SECTION VIEW.	2/14/13	BIM	GE
1B	CORRECTED ORIENTATION OF SECTION VIEW.	4/8/14	DPD	GE



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 173121 *mls*
180226



NOTE:
PART OF KIT RBW6205G11231-3G

RED BARN MACHINE	
TITLE GUIDE	
DWG NO. RBW6205G11651-3G	REV 1B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DRAWN BY CLOUGH
TOLERANCES ON: DECIMALS XXX $\pm .005$ XX $\pm .01$ X $\pm .1$	APPROVED <i>D Weil</i>
FRACTIONS $\pm 1/32$ ANGLES $\pm 5^\circ$	HEAT TREAT FINISH CLEAR ANODIZE
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES 015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	SPEC MIL-A-8625F, TYPE II, CLASS I
SCALE 1:8	DATE 4-30-10
SHEET 1 of 1	

ASSY QTY	ASSY #	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS
				1	GUIDE	6061	$\varnothing 19-3/4 \times 2-1/2$



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039248**

Supplier: WEJ001-VC
Wejay Machine Products Co. Ltd
600 O'Connor Drive
Kingston
ON
K7P 1N3 Canada
Phone: 613-384-1662
Fax: 613-384-2997

PO No: PO039248

PO Date: 3/8/18

Due Date: 4/19/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Baker, Diane Phone:
dbaker@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

REVISED

APR 05 2018

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	RBW6205G11651-3GP			Guide As Per Dwg RBW6205G11651-3G 1B	Partial	4/19/18	6 Ea	6 Ea	0 Ea	\$740.00/Ea	\$0.00
Line Item Note job# 173121											
					Firmed	4/20/18	2 Ea	0 Ea	2 Ea	\$740.00/Ea	\$1,480.00
Sub Total:							8	6	2		\$1,480.00
2	RBW6205G11751-3GP			Guide As Per Dwg RBW6205G11751-3G Rev 2	Partial	4/19/18	6 Ea	6 Ea	0 Ea	\$695.00/Ea	\$0.00
Line Item Note job# 173122											
					Firmed	4/20/18	2 Ea	0 Ea	2 Ea	\$695.00/Ea	\$1,390.00
Sub Total:							8	6	2		\$1,390.00
Grand Total:											\$2,870.00

Order Notes

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

CY

Plex 4/5/18 9:00 AM dart.lavoie.chantal



600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3

PHONE: (613) 384-1662

FAX: (613) 384-2997

CERTIFICATE OF COMPLIANCE

CUSTOMER: DART Aerospace

DATE: April 2, 2018

P.O.# 039248

WEJAY JOB# 39037

I hereby certify that the following material has been inspected/tested and conforms to the requirements and specifications as stated in your contract and as noted below.

PART NO.	QTY.	PROCESS (ES)	SPECIFICATION / REV
RBW6205G11651-3G-1B '19.6" Guide'	6	Machined complete per drawing req'ts.	RBW6205G11651-3G / rev.1B
RBW6205G11651-3G-2 '16.21" Guide'	6	Machined complete per drawing req'ts.	RBW6205G11651-3G / rev.2

Note: Material Test Certs attached - ref. 'KUMZ' Lot# 648135 (Wejay TN# 33965-1).

Records of Inspection/Test will be retained for 5 years minimum.

Sincerely,

Clifford Smith
Authorized Q.A. Signatory



INSPECTION CERTIFICATE № 17.127140

EN 10204 - 3.1

Consigner: KAMENSK URALSKY METALLURGICAL WORKS 5, Zavodskaya Str., Kamensk Uralsky, Sverdlovsk Region, 523405, Russia Tel: +7 (3439) 39 54 17 Fax: +7 (3439) 39 52 49				JOINT STOCK COMPANY							
Buyer: Thyssen Krupp Materials, NA				Quantity, pcs: 2							
Consignee: THYSSEN KRUPP MATERIALS, NA				Net Weight, kg: 2165							
P.O. No: PEC-282822				S.O. No: N17078							
Article No: -				Item No: 1.5							
				Package No: 612318							
Description of Goods: Plates				Requirements on the Products:							
Grade of Product		Dimensions, inch (mm)		Material conforms to quality of alloy: 6061 T651							
		2.75"X60.6"X144.5" 69.850X1536.7X3670.3		Product conforms to all requirements of: ASTM B209-14; SAE AMS 4027 Rev. N (2014); SAE AMS-QQ-A-250/11A (2008). This product conforms to European Union RoHS Directive 2011/65/EU							
Mechanical Properties											
The Condition of Tested Standards	Lot No.	Heat lot No.	HT Charge No.	Sampling direction	Tensile Strength, Rm / Cut ksi		Yield Strength, Rp0.2% / Clenching test ksi		Elongation, %		Hardness, HBW
					min	max	min	max	min	max	
Required				LT	42.0	-	35.0	-	6	-	-
	648135	12-6271	07181	LT	47.2	47.8	43.4	43.9	10.9	10.9	-
Chemical Composition, %											
Element	Silicon Si	Iron Fe	Copper Cu	Manganese Mn	Magnesium Mg	Chromium Cr	Zinc Zn	Titanium Ti			
Required	0.40 - 0.8	0.7	0.15 - 0.40	0.15	0.8 - 1.2	0.04 - 0.35	0.25	0.15	-	-	-
Contents	0.64	0.36	0.17	0.09	1.0	0.08	0.14	0.08	-	-	-
Element									Other Elements		Aluminum Al
									Each	Total	
Required	-	-	-	-	-	-	-	-	0.05	0.15	remainder
Contents	-	-	-	-	-	-	-	-	0.05	0.15	remainder
Other Tests											
Method	Macro-structure	Micro-structure	UT	K1c	Electro-conductivity, IACS%	SCF	Contents H2 of metals	Raw material used for manufacturing supplied products was tested for compliance with international radiation safety regulations during incoming inspection. Russia is country of melt and manufacture.			
							MAX 0.15				
Result							0.16				

On behalf:

Date:

QCB Inspector

Inspection Department Engineer



KUMZ J.S.Co.

26.07.2017

Gureva V.N.

Zyryanova K.V.

TN33965-1
Job #39037

REF. DART AEROSPACE P.O.#039248



MAR 20/18